AUSTRALIAN BIRD SONGS

Recording:
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Text:
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EP RECORD INSIDE FRONT COVER

THE
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★
AUSTRALIAN BIRD SONGS
RECORDED BY
CARL WEISMANN
45 R.P.M.
SID
MX15
1. PEEWEE
2. JACKY WINTER
3. RUFOUS WHISTLER
4. OLIVE-BACKED ORIOLE
5. YELLOW ORIOLE
6. WHITE-CAPPED NODDY
7. AUSTRALIAN GANNET
8. FAIRY PRION
9. BLUE PENGUIN
★
73 ELIZABETH STREET
BRISBANE

Australian Bird Songs

BY
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AND
ALLEN KEAST

INTRODUCTION

In 1957-1958 Carl and Lise Weismann, two Danish recording specialists visited Australia in order to record and film the bird life. They came armed with a huge three foot parabolic reflector with microphone in the middle, capable of being "focussed" on a singing bird and so isolating its call from the cacophany of sounds around it. A pair of fairly expensive tape recorders was the other part of the equipment.

Carl was one of the first zoologists in the world to record bird sounds and he brought with him many years of experience in the field. To Lise, at this stage a new bride, fell the role of handling the recorders whilst Carl attended the reflector. Travel was by a panel truck and in this way they roamed far and near through some of the best "bird country" in eastern Australia, camping here and there, listening to the sounds of the bush whilst the billy boiled. They arose before dawn to get the first of the day singers, and roamed the tracks after dark to capture the sounds of the night. Finally, offshore islands were visited to get the sounds of the sea birds.

This record contains a selection of the bird sounds recorded by Carl and Lise Weismann in the coastal strip of Australia from the New South Wales—Victorian border to the Mitchell River by the Gulf of Carpentaria in Cape York. It contains a combination of the most popular and best-known bird songs, as well as some of the most bizarre, to give proper perspective. Thus, the magical and robust laughter of a group of Kookaburras welcomes the dawn. The early morning carolling of the Magpies is heard, then the ethereal, ventrilloquial, flute-like song of the Pied Butcherbird. Honeyeaters, of which there are some seventy species in Australia, vary greatly in their calls, extremes being the garrulous, rollicking call of the Leatherhead and the delicate spring song of the diminutive Brown Honeyeater. The joyous "Sweet pretty little creature" call of the Willie Wagtail is followed by the "Peter, peter" song of the Jacky Winter, and that of a pair of Peewees, the species that calls its name. Finally, the listener is transported to the realm of the sea birds, tiny islands a few score miles off the coast. Amongst the Pisonia trees of Heron Island on the Great Barrier Reef, the White-capped Noddies have their home, filling the day air with their chattering as they sweep to and fro in from the sea. The rocky, sea-swept islands of the southern coast of the continent are the home of the nocturnal Little Penguin and the Fairy Prion. Only after dark do these ocean wanderers venture ashore and then, against the background of the churning surf, they fill the night air with their weird cacophany.

THE FUNCTION OF BIRD SONG

So ACCUSTOMED are we to thinking of bird song from the beautiful aspect that a review of its deeper biological aspects is well worth while.

Bird calls function basically, of course, as a primitive kind of language, enabling the members of a pair or a group to keep in contact

whilst they forage in the trees or undergrowth, serving to warn the others of danger, and filling an important place in courtship and defence of territory. Towards these ends any species with reasonable vocal accomplishments has several distinct calls, the individual function of which can be understood with proper study.

Depending on the way of life of the species so the degree of emphasis on the different kinds of call varies.

The true songs, the beautifully protracted sequences of notes that so enliven the spring mornings in the Australian bush are largely restricted to the breeding season. They have two main functions in the world of the birds, courtship of the female and to warn other members of the species that the particular area of terrain is already occupied. In many species it is the male song that attracts the female into his territory, for many species change mates from year to year. In other species, in which they remain paired, this initial function is not necessary. It is now fairly well recognized that in most species the actual courtship of the male is necessary for the female to come into reproductive readiness, the sex organs of birds having to be redeveloped each year. Again, in species like the Lyrebird, where all domestic chores are taken care of by the female the male song possibly functions as a sort of reassurance and even in directing attention away from the actual nest.

By and large, however, the major function of the spring song is territorial. At no time during the breeding season are the members of a species concentrated, rather they are spread out over the countryside at a minimum density, each in a small area of its own (i.e. "territory") from which other members of the species are excluded. These territories have to be obtained (or retained) at the beginning of the breeding cycle and would-be dispossessors kept at bay. Birds accomplish this partly by their protracted spring songs, that serve to advertise that the area is already occupied. The owner will come to the edge of the territory and aggressively "sing at" a rival. Only if this fails does the owner, with feathers fluffed out and fury in his eye, launch a physical attack. A net result is that cases of a bird injuring a member of its own species are few and far between. Territories of this type are not, of course, developed in colonial species, though in Gannets and others it might be noted that there is a minimum distance between nests.

The protracted and beautiful songs that characterize so many of our Australian birds can be heard, accordingly, only during the spring breeding season. Inland areas may, however, be an exception to this for rainfall is unpredictable and spring may find the country in the grip of drought. Birds have to be prepared to breed when the environment will let them, at any time of the year. On repeated trips to far western New South Wales I have noted the effects of a sudden shower of rain on the birds of an area. Thus, at Bourke one year an inch of rain inspired two Wagtails (which previously had been silent) to sing all night. From the absence of a dawn chorus it became, in a space of two days, of almost ear-splitting intensity.

In conclusion, one point about bird calls should be mentioned, and this is that often a species differs somewhat in its song from one part of the range to another. Any ornithologist who has travelled widely recognizes this. Accordingly, the locality is given for each song featured in this record.

SIDE ONE

(1) LAUGHING KOOKABURRA

(Dacelo novaeguineae)

THE LAUGHING CALL of the Kookaburra is perhaps the most distinctive sound of large areas of the Australian bush. It is usually heard just before dawn, at dusk, or when the sky is overcast and cloudy and rain is imminent. Starting from a slow chuckle it gradually rises to a crescendo, the cooperating individuals "singing" and chortling at different rates and in different keys so that the net effect is a concert that is a delight to hear.

Kookaburras tend to live in forest and bush of the more open type, taking a lot of their food (lizards, large insects, crabs, frogs, snakes and baby birds) both from the ground or water's edge and the trees. Usually they are seen (except when five or six gather for a concert) either solitarily or in twos or threes. The Kookaburra has responded well to settlement and most bush picnic areas have their regular Kookaburra or two. Many suburban householders feed them regularly with meat, although this is a mixed blessing as their presence tends to frighten away the smaller birds.

In coloration the Kookaburra is dark brown on the back and wings, paler brown on the top of the lightly streaked head, has a dark streak through the eye, is pale below, has pale blue feathers on the shoulders, and a white patch at the base of the wing quills which is conspicuous in flight. The length is 16¼ to 17⅞ inches, and the weight 9-13¼ ounces.

The eggs are laid in the hollow spout of a tree, or hole in the bole of a tree, are 2-4 in number, white in colour and rather rounded in form. They take 25-29 days to hatch and the nestlings remain in the hollow 4-5 weeks.

Kookaburras occur in the woodland and forest areas of eastern Australia, north to Cape York, and have been introduced to south-western Australia and Tasmania.

The calls featured here were recorded at Corindi, near Grafton, northern New South Wales, at dawn on September 5, 1957.

(2) BLUE-WINGED KOOKABURRA

(Dacelo leachii)

COMPARED TO ITS BROTHER-SPECIES the Blue-wing has one of the most curiously unpleasant calls of any Australian bird, more like a demoniacal laugh than a good-natured human chuckle.

Notwithstanding this there is a general similarity in habits in the two species. It is very vociferous in the early morning and towards dusk, restling quietly in the foliage during the heat of the day. Again, one bird seems to start the chorus by a loud "kook kook", the resultant chuckles and chatterings gradually building up in continuity and volume. This bird replaces the Laughing Kookaburra in north-western, northern, and north-eastern Australia, occupying a broad coastal and inland strip from Shark Bay in the west to about Bundaberg

in central southern Queensland. In eastern Queensland it occupies the more open and dryer forested areas, the southern species extending north to Cape York in the mountains and better forests. There seems to be broad agreement in the food of the two.

The Blue-winged Kookaburra is distinctly the prettier of the two species. The top of the head is alternatively streaked with brown and light buff, a white collar separates head and body, the back is brown, the upper tail sky blue at the base, the wings blue and brown. The throat is white and the chest and abdomen yellowish-buff in colour and lightly barred. The sexes are distinguishable on their tails, that of the female being a rich chestnut brown, barred blue-black, whilst the tail is purplish-blue in the male. The body length is 16-17½ inches and the body weight 9½-12½ ounces.

Three or four white eggs are laid in a hole in a tree, usually in August or September.

The calls on this record were recorded on Magnetic Island, near Townsville, on December 11, 1957. At one point a faint background call of the Grey Thrush comes into the recording.

(3) WHITE-BACKED MAGPIE

(Gymnorhina hypoleuca)

FEW BIRDS ARE BETTER KNOWN than the Magpies, for they inhabit partly cleared farmlands and forest country of the more open kind, hence settlement and the clearing of the land has meant a lot to them. Magpies feed in the open ground, consuming lizards and a variety of insect pests. They require trees for roosting and breeding only.

The melodious carolling of the Magpie is one of the most striking features of spring mornings. Commonly several birds will be heard singing, two or three nearby, others in adjacent territories off in the distance. It is one of the outstanding songsters of the world.

Magpies are widely distributed throughout Australia the different forms only differing slightly in the proportions of black and white. The body length is perhaps eighteen inches.

The nest is built high in a tree, commonly at heights of up to seventy feet, usually in an upright forked branch. It is a deep, bowl-shaped structure of sticks and twigs, lined with grass, horsehair, wood, fine roots, and other delicate material. Four eggs are usually laid and vary quite a lot in colour with the particular bird. The basal colour is generally greenish-blue to bluish-white and the markings take the form of streaks, scratches, and smears of reddish brown, or grey-brown. Magpies defend the nest vigorously and do not hesitate to attack passers by or stock that venture too close, dive-bombing with frightening perseverance.

The call featured here was recorded near Christchurch, New Zealand, to which country the species has been introduced. The familiar "chip, chip" call of the introduced European Sparrow, a common companion of the Magpie around farm houses, comes in as background.

(4) PIED BUTCHERBIRD

(Cracticus nigrogularis)

THE REMARKABLE, ventriloquial, flute-like notes of this species are a feature of the early spring mornings over the interior and all except the more southern parts of the continent. A high isolated tree is commonly chosen and the calls have a remarkable carrying capacity. Yet it is often hard to locate the singing bird as the notes do not seem to come from a point source and the confusion is aggravated by the bird's habit of flying off as one approaches, keeping within the line of the tree, and resuming its singing from behind or to the right or left of the original tree.

In appearance this Butcherbird looks like a small Magpie, with sharply contrasting black and white plumage. The head, neck and breast are jet black, as well as the upper back, tail, shoulders, and outer wing feathers. The nuchal collar, wing bar, tips to the tail features, and lower breast and abdomen are white. The body is thirteen inches in length.

It consumes beetles, crickets and other insects taken from the trees or ground, as well as reptiles, and small birds.

The nest is an open and fairly deep structure, composed of sticks and twigs, lined with fine grasses, and is placed high in a tree. Three to five eggs are laid, being greyish-green to pale brown, blotched and freckled with shades of brown and some black spots. It is a spring breeder.

This song was recorded on September 5, 1957, at West Burleigh, in southern Queensland.

(5) GREY BUTCHERBIRD

(Cracticus torquatus)

THIS BUTCHERBIRD IS also a splendid songster but the call varies quite a lot from one part of the range to another. It is well-known in the bush-land, pairs commonly taking up residence near homes, its spirited, beautiful notes enlivening the day. The call is heard continually during the spring, less often at other seasons. It is one of the first birds to call in the mornings.

The Grey Butcherbird inhabits the southern two-thirds of the continent, from coastal forests to inland desert areas. It consumes a variety of live food: beetles, grasshoppers and other insects taken from the branches or ground, mice, lizards and, not uncommonly, small birds. In fact, so devasting is it that small birds usually avoid the immediate vicinity of the butcherbird's terrain. Canaries are often stolen from cages by this species. It has the habit of wedging the bodies of prey in a fork, to be consumed at leisure. A pair of birds frequent an area and exhibit well developed territoriality.

The Grey Butcherbird has the shape of a small

Magpie but is of an over-all greyish colour. On closer inspection the head, cheeks and tail are seen to be black, the back grey, the rump white, and the wings brownish-grey, whilst the underparts are greyish white. The body is 9½ to 11½ inches in length.

The nest, cup-shaped and shallow, some 9 inches in diameter composed of twigs and sticks, lined with fine grass, is placed on a limb at heights of from 8 to 30 feet above the ground. The sexes combine in a vigorous defence of the nest. The eggs are greyish-green or bluish in colour with blotches of red, chestnut, and brown, at the larger end. It is a spring breeder, even in dry areas.

This song was recorded on August 29, 1957, at Corindi, near Grafton.

(6) GREY THRUSH

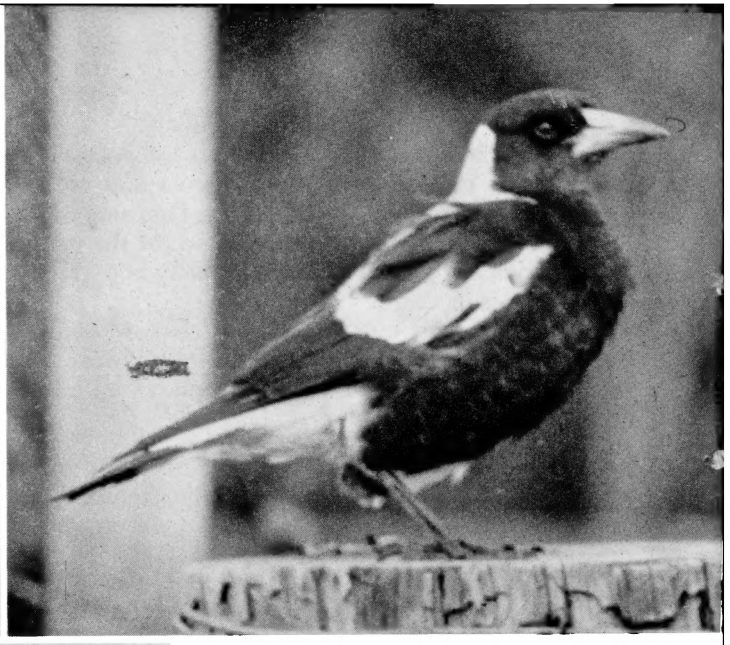
(Colluricincla harmonica)

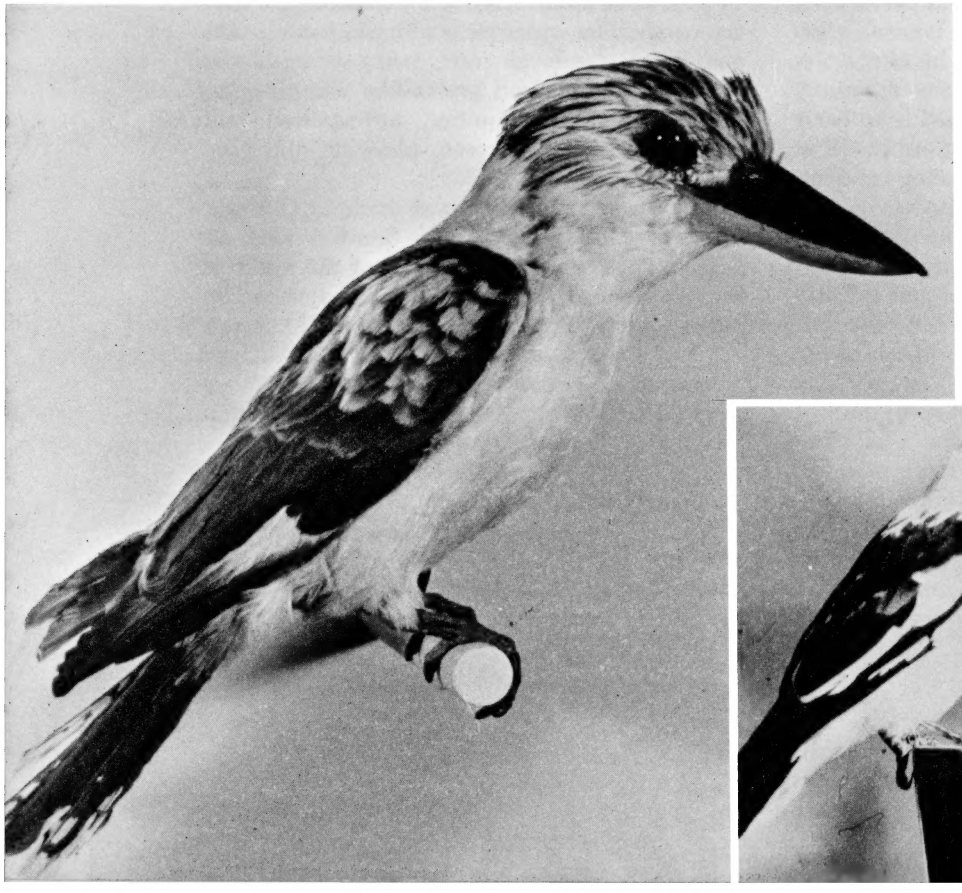
THE GREY THRUSH is a fine whistler with a repertoire of liquid notes. A forest inhabitant, it has a wide range through the settled parts of the continent and is replaced in the central areas and in the north-west and north by closely related forms. The calls are prominent in spring, commencing in August, for the bird is an early breeder. Only odd catches of song are heard at other times of the year, the birds being resident. Thrushes often come to garden food trays and may nest in shrubbery against a building.

The Thrush is slim-bodied, mid-grey in colour and is brownish on the back. The tail is fairly long. The Thrush is insectivorous but occasionally takes lizards and small birds. Much of the food is taken from the ground.

The deep, cup-shaped nest is often placed in a hollow stump, in a low fork of a tree, or, where a strip of bark hangs from a tree, between it and the trunk. The structure is of bark, coarse roots and long strands of grass, being neatly lined with fine rootlets and grass. The whitish eggs, three or four in number, are spotted and blotched with olive-brown, blackish, and grey markings.

The present recording was made at Corindi, near Grafton, northern New South Wales, on August 30, 1957. Short catches of the notes of the Leatherhead and Brown Honeyeater can be heard intermittently in the background.



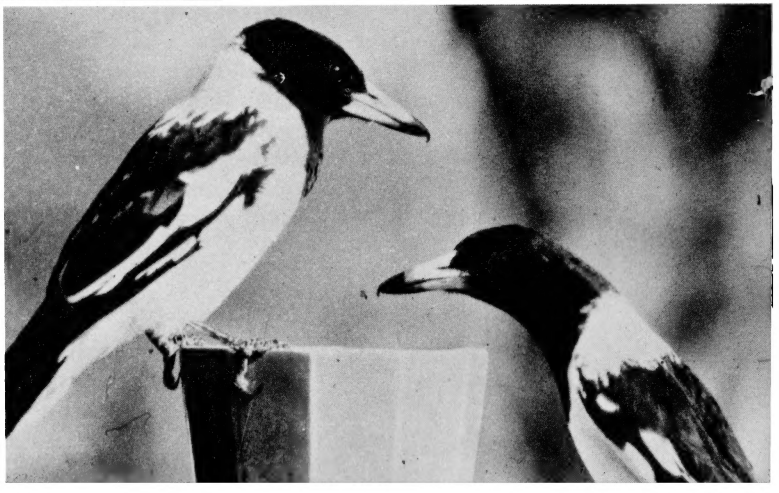


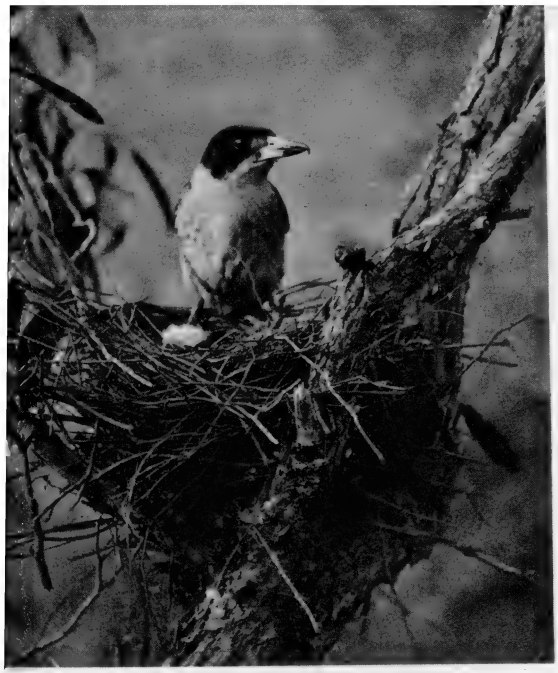
Top Left:
(1) Laughing Kookaburras
(Photo Lise Weisman)

Lower Left:
(2) Blue-winged Kookaburra
(Photo Queensland Museum)

Top Right:
(3) White-backed Magpie
(Photo Lise Weismann)

Lower Right:
(4) Male and Female Pied Butcher Bird
(Photo G. M. Blair)





Top Left:
(5) Grey Butcher Bird
(Photo K. A. Hindwood)

Lower Left:
(6) Grey Thrush
(Photo Queensland Museum)

Top Right:
(7) Noisy Friar Bird
(Photo Kay Breeden)

Lower Right: ....
(8) Blue-faced Honeyeater
(Photo Queensland Museum)

Lower Centre:
(9) Brown Honeyeater
(Photo Barry and Joanna Morgan)

(7) LEATHERHEAD

(*Philemon corniculatus*)

THE ROLLICKING, GARRULOUS, spring call of the Noisy Friarbird or Leatherhead is certainly joyous and sustained even though lacking in beauty. One of the favourite habitats of these birds is the tall trees on river and stream banks and it is there, in the pendant foliage, that they hang their striking nests of red bark.

Leatherheads are amongst the largest of the Meliphagidae or honeyeaters, the family of birds with the largest number of species in Australia (69) and that range in size from species like the tiny Brown Honeyeater, 5 to 5½ inches in length, up to the Leatherhead (15 inches) and Yellow Wattle-bird (about 20 inches).

Leatherheads are restricted to eastern Australia, inhabiting the forest and woodland belts where, commonly, they are plentiful. They are very noisy in spring and quite pugnacious towards other birds, driving them from the nesting tree. The food is the typical broad fare of so many honeyeaters: native fruits and berries, nectar, insects, and the like. On occasions they attack fruit in orchards.

The name comes from the black, leathery head, the bareness of which is also responsible for the other name of the group: Friarbirds. The general body colour is grey-brown, the shoulders and throat being paler, the underparts somewhat intermediate in colour.

The nest is very deep and cup-shaped, suspended round the rim from a drooping branch at the end of a limb, commonly over water, and at heights of up to 60 feet from the ground. Reddish bark is prominent and it is combined with grass and cobwebs and lined with fine grass. The three or four pinkish eggs, spotted with clouded markings of red and purple, are very beautiful.

The song sequence reproduced here was recorded at Corindi, near Grafton on August 29, 1957. The song of the Grey Thrush comes through faintly at one point.

(8) BLUE-FACED HONEYEATER

(*Entomyzon cyanotis*)

THIS IS ONE OF THE LARGEST of the honeyeaters (Meliphagidae) and one of the most distinctive, green on the back, black on the head, and white below and with a conspicuous patch of blue flesh on the side of the face. It is some 14 inches in length and attention is directed to them by the fact that they are commonly in small parties, are often somewhat noisy and quarrelsome, and occasionally enter orchards in search of ripening fruit.

The notes of the Blue-faced Honeyeater, if monotonous, have a joyous quality about them.

The species is not uncommon throughout the savannah woodlands of northern Australia but in the most southern parts of its range, such as in New South Wales, it is mostly found along the

inland rivers. They move freely from tree to tree in their quest for the large insects of the foliage and branches, native fruits and berries, and to join their smaller brethren amongst the nectar-laden eucalypt blossoms. In contrast to the degree of boldness attained when inhabiting gardens the Blue-faced Honeyeaters are generally not easy to approach in the bush.

The nest of the Blue-faced Honeyeater consists of a cup-shaped structure of fine strips of bark, hair, and grass, resting in a flatter platform of coarser sticks and twigs, the whole wedged amongst the branchlets of the outer part of a tree up to 60 feet from the ground. The two to five eggs laid are a rich salmon or fleshy-buff colour, spotted here and there with purplish or chestnut-coloured markings. Depending on locality they may nest as early as July or as late as January.

The calls of the birds featured here were recorded on the Mitchell River, Cape York, on November 16, 1957.

(9) BROWN HONEYEATER

(Lichmera indistincta)

THIS MODESTLY-PLUMAGED HONEYEATER, one of the smallest of the group (5-5½ inches in length) has, perhaps, the prettiest song of all. Yet it is a species that few people know for in the more southern parts of its range (south to Sydney) it primarily inhabits the mangroves, the tangled and mosquito-ridden trees of the tidal estuaries. Fortunately it does visit the parks and gardens in autumn and winter. In the Botanic Gardens of Sydney, Brisbane, and Perth, its spirited and beautiful call-notes come forth from amongst the the flowering bottlebrushes and fuschias as it extracts nectar from the blossoms.

The Brown Honeyeater occupies a wide range of habitats, taking the continent as a whole. Whilst one normally thinks of it as a coastal species it lives along the dry watercourses of western Queensland and central Australia, often wandering far into the desert in search of flowering bloodwoods.

The coloration of the Brown Honeyeater is greyish-brown above, with a little olive green on the wings, grey below, and there is a tiny patch of yellowish-white feathers behind the eye. The bill is somewhat long and downwardly curved, an excellent instrument for penetrating the flowers for the nectar of which it is so fond. Birds will often be seen with the forehead covered with pollen and along with other honeyeaters they must fill a valuable role in pollination of trees and shrubs. Insects are consumed when there is no nectar to be had.

The vigorous "signal" notes of the Brown Honeyeater are penetrating and melodious. The spring song, featured in this recording, has tonal qualities reminiscent of that of the Reed Warbler.

The nest of the Brown Honeyeater is a small, deep, and finely woven cup (2½ inches in depth and the same in width), of bark and grasses, suspended amongst the branches or leaves of a shrub or bush. The two eggs are whitish with a few reddish brown spots.

This record was made in the mangroves, ten miles south of Gladstone, Queensland, on September 15, 1957.

Top Left: (10) A Wagtail and family.
(Photo John Orrell)

Centre Left: (11) Female Peewee
(Photo Kay Breeden)

Lower Left: (12) Jacky Winter
(Photo K. A. Hindwood)

Top Right: (14) Olive-backed Oriole
(Photo Roy P. Cooper)

Lower Right: (13) Rufous Whistler
(Photo Queensland Museum)

Top Left: (15) Yellow Oriole
(Photo Queensland Museum)

Lower Left: (16) White-capped Noddy at Heron Island
(Photo Lise Weismann)

Top Right: (17) A Colony of Australian Gannets
(Photo Lise Weismann)

Centre Right: (18) Fairy Prion
(Photo Queensland Museum)

Lower Right: (19) Little Penguin
(Photo *The Age*)

(10) WILLY WAGTAIL

(Rhipidura leucophrys)

THE WILLY WAGTAIL or Black and White Fantail is one of Australia's best known birds for it occurs everywhere from city parks and gardens to the farming country of the south, west, and north, and is equally at home in woodland as in desert. Its appearance is striking, black above and white below, and with white eyebrows. The long tail is waved ceaselessly from side to side as it hops over the grass or from branch to branch. The call is a melodious succession of notes which has been described as "sweet pretty little creature" that is uttered more frequently in spring than at other seasons when the bird may irritate sleepers by calling loudly all through the night. The Wagtail also has a series of harsh chattering notes which country schoolchildren, in their picturesque language, refer to as the "wagtail rattling his matchbox".

Wagtails are fearless birds, a temperament that commonly goes with black and white colouring, and despite their small size (length of body 8-9 inches) can frequently be seen attacking Owls, Kookaburras, and Crows, and teasing the household cat. They defend their nests with equal vigour. Much of the feeding is done from fence posts or low branches, the bird dropping to the ground to secure an insect. Similarly, they sometimes perch on the backs of cows to obtain the insects flushed by the animals' movements. It is one of the native birds that has profited from the clearing of the country.

A beautiful cup-shaped nest of the finest grasses bound and enshrouded in spider web is constructed, some 2¾ inches broad and 1½ inches deep. It typically is placed on a horizontal branch at heights up to 40 feet from the ground. The three or four eggs are greyish in colour spotted with brown markings on the larger end. Incubation takes thirteen days and the young remain in the nest a similar period (Serventy and Whittell: *Birds of Western Australia*). They are spring breeders in most parts of Australia and, depending on the season will raise up to three broods.

The calls featured here were recorded by moonlight at West Burleigh, southern Queensland, on September 5, 1957.

SIDE TWO

(1) PEEWEE

(Grallina cyanoleuca)

PEEWEES OR MAGPIE-LARKS, the first name being derived from the call and the second from their black-and-white colouring, range throughout Australia. They belong to a group of strictly Australo-Papuan birds, the "mud-nest builders" or Grallinidae, in which the nests are bowl-shaped structures of mud.

Peewees are well-known from their tameness and habit of feeding nonchalently on the grass near picnickers and close attendance on the backyard gardener as he digs the soil. They feed on a variety of insect life, as well as earthworms and other invertebrates. One of their favourite feeding areas is the edge of a pond or

stream, where they apparently obtain creatures washed in by the water.

These birds characteristically occur in pairs, the female differing from the male in having the forehead and throat white and in lacking the white eyebrow. Length of the body is about 11½ inches. The studies of A. H. Robinson in Western Australia indicate that Peewees tend to pair for life, and hold the same territory on successive seasons. In autumn and winter, however, large flocks may occur, sometimes hundreds strong. It has been suggested that these are young raised the previous season and that adults do not join them to any extent.

Adult Peewees are aggressive towards potential predators, not hesitating to attack Crows that transgress their territory. Part of the call is a duet between the members of the pair. The two birds jointly construct the nest, incubate the eggs, and feed the young. Commonly two broods are raised in a season but this may be reduced or exceeded depending on the nature of the season—and availability of fresh mud.

The bowl-shaped nest of mud is reinforced with strands of grass and is some 6 inches in diameter and 3-4 inches deep, the walls being nearly an inch thick. It is placed on a horizontal branch of a tree, commonly one beside a pond or watercourse from which abundant fresh mud is available. The three to five eggs, each with reddish brown blotching near the larger end, are placed on a lining of fine grass. There is an interesting nesting association between Peewees and Willie Wagtails, the two species often nesting in the same tree.

The call-notes featured here were recorded on Heron Island, southern Queensland, on September, 30, 1957.

(2) JACKY WINTER

(Microeca leucophaea)

THE JACKY WINTER or Brown Flycatcher also inhabits city parks and bush alike and comes under notice because of its habit of sitting on a fence post or dead limb of a tree from which it flutters into the air in pursuit of flying insects. Few can miss the sweet melodious succession of notes that ring through the air on spring mornings, notes that have been likened to the phrases "pretty, pretty, pretty, peter, peter, peter".

The Jacky Winter is a very plain little bird, grey-brown above, and greyish-white below, and having a body length of 4¾ to 5½ inches. The tail is tipped white. It has a wide range through the lightly forested and woodland areas of Australia but, unlike the Wagtail, does not extend far into the interior.

The tiny nest is a masterpiece of camouflage. It is the shallowest of saucers and is placed high (up to 40 feet) on a horizontal branch being so built into a fork and adorned with strips of bark on the outside as to be almost invisible from below. Most nests are found by patiently watching the bird until it returns. The nest is about 2 inches across and ½ inch deep and is made of grass and spider's web. The two eggs are greenish-blue with purplish brown spots and blotches on the larger end. Two broods are

often raised in a season which, in most places in the south, starts as early as August and may continue until December. Incubation and nestling periods are probably thirteen to fourteen days. As with most small birds nest-building, incubation, and the raising of the young is a joint affair, being shared by both parents.

The general body form of the Jacky Winter is rather rounded and robin-like but its habits are quite distinct.

The calls featured here were recorded at Mangrove, ten miles south of Gladstone, Queensland, on September 15, 1957.

(3) RUFOUS WHISTLER or ECHONG

(*Pachycephala rufiventris*)

THIS SPECIES IS ONE OF THE MORE melodious of the migrants in eastern Australia, the striking "ee-chong", followed by ringing succession of notes and final whip-crack whistle, being one of the features of mid-spring. The species has a number of distinct calls.

Rufous Whistlers are forest and woodland birds, living and feeding mainly amongst the branches of the trees and shrubbery. From these they obtain a variety of insect life. They have a wide range in Australia, being migratory in the south-east. The male has a chestnut or rufous breast, with a black band separating off a white throat. The head and back are grey. The female is greyish-brown, the buff-coloured breast being longitudinally streaked with black. Rufous Whistlers are 6 to 6½ inches in body-length.

The species commences nesting in October in eastern Australia, the cup-shaped structure of grasses and rootlets, lined with finer material, usually being placed in an upright fork at heights of from 6 to 30 feet above the ground. The two to three eggs are highly characteristic, being olive in colour, spotted and blotched with dark brown. Both sexes share in the domestic chores. The incubation and nestling periods are about 15 days. A second brood may be raised in November or December. After breeding the species is a relatively silent one, catches of only a few notes being uttered.

The song featured here was recorded at the Ponds, near Armidale, New South Wales, on January 6, 1958.

(4) OLIVE-BACKED ORIOLE

(*Oriolus sagittatus*)

ORIOLES ARE SOMEWHAT NOMADIC inhabitants of the forests and woodlands, and are usually in small groups or flocks during the autumn and winter. Their characteristic call-notes are restricted to infrequent "catches" then. By spring, however, when each pair is established in its own territory, sections of the forest are alive with their melodious, rippling song-sequences. The

Olive-backed Oriole is a splendid songster and is also an excellent mimic on occasions. It has an extensive range, from Adelaide and Melbourne in the south, north through the coastal forests and riverside woodlands inland to north Queensland, the Northern Territory, Kimberleys and New Guinea.

The Orioles inhabit areas of tall trees, obtaining insects, berries and native fruits from the branches and foliage. In this diverse diet the Australian species resemble their relatives in Europe and Asia, for the genus *Oriolus* has a very wide range. There are two Australian species, the present one having a white or cream-coloured underparts streaked with black, a reddish eye and flesh coloured beak, with olive-green upper parts. The Yellow Oriole of the north is olive-yellow in colour. Orioles are slim-bodied birds, about the size of a thrush.

The nest of the Oriole is deep, open, and cup-shaped, composed of stringy bark, lined with dried grass, and is suspended from the drooping outer foliage or from the smaller branchlets at the end of a limb. Whilst occasionally built as low as 15 feet the nests are commonly at heights of 60-80 feet above the ground. Two to four eggs are laid and are cream-coloured with dark brown and grey markings. There are often two broods in the season that extends from September to January.

The calls featured here were recorded at Emu Park, Queensland, on December 27, 1957.

(5) YELLOW ORIOLE

(*Oriolus flavocinctus*)

THE YELLOW ORIOLE is best-known as an inhabitant of the jungles and forests of north Queensland (south to about Townsville) but the range extends through the coastal Northern Territory to the Kimberleys and New Guinea. One may see them first in the fig trees about Cairns, or in the trees that fringe the many picnic areas of the adjacent rain forests and tableland. The pleasant, bubbling notes are features of such places, many birds usually being present so that the trees ring with their calls. Though they are constantly on the move, flying from tree to tree, so dense is the foliage that it may be some little time before the observer can get a really clear view of an individual bird. In areas where both the oriole species occur the Yellow Oriole is more an inhabitant of the richer and denser forests, the Olive-backed Oriole the more open ones.

The richness of the yellow colouring of this species varies with the area, it being darker in the humid forested regions, paler or brighter where the climate is slightly drier.

The Yellow Orioles breed in the spring in Queensland (September to December), constructing an open cup-shaped nest of twigs, strips of bark, and vine tendrils in the outer branches of a tree at heights from the ground ranging from 20 to 60 feet. The cream-coloured eggs are spotted with blackish brown at the larger end.

The call-notes featured here were recorded at the Mitchell River Mission, Cape York on November 15, 1957, The microphone was set underneath a mango tree.

(6) WHITE-CAPPED NODDY

(Anous minutus)

NODDIES ARE DAINTY CHOCOLATE-BROWN sea-birds with white caps. The wings are long and tapering and the feet are webbed, adaptations for a life over the waves and for paddling when they alight on the surface. The body length is 13-14 inches. They come to land only to breed, selecting some isolated sub-tropical or tropical islet for the colony.

Heron Island, the tourist resort near Gladstone is the best-known of the breeding islands and the colony inhabiting the pisonias there is thousands strong. Colonies also occur on North-west Island and others along the reef. Tourists come to know the Noddies as the small brown birds that are forever streaming to and from the sea, fluttering along the avenues amongst the trees, and filling the air with their calls as they go about their domestic routines. Like the other sea-birds the Noddies have no song, just yelping communication calls. But quite a clamour results with hundreds all calling at once. The calls of the White-capped Noddies are among the many reminiscences of days spent among the tropical islands of the Great Barrier Reef.

Noddies will be seen in tropical waters throughout the world but chiefly keep close to the islands. They feed from the surface of the sea by day, retiring to land at night. Their long beaks and slim body-form demark them as close relatives of the Terns and like these birds they mostly flutter then drop down on to food (fish and small surface animal life) from the air.

The White-capped Noddy nests in trees laying the solitary egg (white with purplish-red blotches) lying on a crude nest of piled pisonia leaves placed either in a fork or on a horizontal branch. The nests may be up to 50 feet from the ground and, commonly, there are many to a single tree. The birds are ashore on the breeding islands from about September to January.

The calls featured on the record were recorded on September 30, 1957, and include the chattering of a large number of birds as they flutter and sweep in from the sea. A final sequence is a welcome from a sitting bird (on a nest 9 feet above the ground) as its mate flutters in to join it.

(7) AUSTRALIAN GANNET

(Sula bassana)

THE GANNET IS IN MANY WAYS the most spectacular of all the sea-birds, its vertical dives on to small fish, often from heights of 30-40 feet, and up to 80 feet, being a most impressive sight. The Gannet of Australian and New Zealand waters is a close relative of that of the British and North American coastal waters.

The Australian Gannet is a large bird, with a wing-span of 5 feet 6 inches to 5 feet 9 inches, and a body length of some 3 feet. It is all white, except for a buff-coloured head (visible only at close quarters), but the outspread wings have black tips, the central tail feathers also being black. It is chiefly distinguishable from the

Albatrosses that share its domain by the pointed beak.

Gannets also come ashore only to breed, selecting isolated rocky islands for their colony as a rule. There are four breeding colonies in Australian waters, the best-known being Cat Island on Bass Strait. The colony most familiar to tourists is that on Cape Kidnappers in New Zealand. From these breeding colonies the birds disperse along the southern coastline of Australia. There are a number of records of birds leg-banded in New Zealand being recovered in Australia. Gannets are a familiar sight in Sydney Harbour and from the coastal cliffs of New South Wales in the autumn and winter. These northward movements are apparently to feed on the schools of mackerel and pilchards, as Dr. D. L. Serventy has shown.

The "nest" of the Gannet is little more than a mound of seaweed, clay and other debris. The colonies may number hundreds or thousands of individuals. Since each sitting bird is somewhat aggressive the nests are an even distance apart—just greater than the distance that an an outstretched beak can reach. To walk through a Gannet colony is a hazardous experience, since each bird welcomes the opportunity to deliver a peck. Where they have been persecuted, such as on Cat Island, the birds take to the air when the intruder ventures too close. The white Gannet eggs take some weeks to hatch, and the downy chick is several weeks on the nest. First year birds are brownish.

The clamour and bedlam featured on this record was recorded on Cape Kidnappers on February 15, 1956. There was a stiff sea breeze blowing and the birds were spiralling in the wind currents over the colony or sweeping in from the ocean with food for sitting mates. The calls are a mixture of squabbles and greeting calls to the new arrivals.

(8) FAIRY PRION

(Pachyptila turtur)

To get the background to this section of the record one must imagine being on a tiny rocky islet on a cloudless night. The sea is churning in the stiff westerly breeze and carrying the spray up on to the higher parts of the island. We are standing on a grassy and shrubby plateau awaiting the return of the Prions. Presently there is the silhouette of a small, long-winged bird against the stars. It utters a plaintive cry and disappears. Then one sees another, and then there are half a dozen fluttering above one's head. The cries increase in number and volume. Then the birds land, plummetting in rather ungainly fashion about one, and half-run, half-waddle on ill-conceived legs to their small burrows in the ground. Their calls are answered by those of the sitting mate within the burrow. The clamour increases and one feels that one is lost in a mysterious half-world of unseen ghosts.

Prions have a body length of 10-12 inches and a wing-span of perhaps 20 inches. They are grey above and white on the underside of the body. The bill is short and, in most species, relatively broad. One can often see them from ships, but close attention to the surface of the waves is necessary as they tend to keep low-down, fluttering no more than a foot or two above the churning waters. Of the five species inhabiting

Australian seas only the Fairy Prion breeds locally, on some of the islands of Bass Strait.

Prions return to their breeding colonies in spring. But even so, their nocturnal habits and retiring nature are such that only the discerning naturalist can locate them. . . unless it be after dark.

The Prion calls recorded here were obtained in Bass Strait in January, 1957.

(9) LITTLE or BLUE PENGUIN

(Eudyptula minor)

THIS SMALL PENGUIN, some 15 inches high, is the only species to breed in Australian waters. They form nesting rookeries on offshore islands, rarely on the coast, coming ashore after dark to their burrows, a straggling line of hopping or waddling but ornate little men. On approaching the colony the air is rent with their curious wailing cries, sitting mates greeting the new arrivals, or neighbours accidently transgressing territorial limits in the dark. The sounds of a colony of nesting Penguins are not easily forgotten.

Penguins are splendidly adapted for life in the sea, the bodies being streamlined, the forelimbs modified as paddles, whilst the toes are webbed. The feathers are tiny and scale-like, and shed water easily. The quickness of the Penguin in diving, turning, and pursuing prey is remarkable. Crustacea, cuttlefish, and small fish form the food. Penguin remains are occasionally found in the stomachs of sharks. Penguins are sometimes found resting on our surfing beaches.

The Penguin is coloured bluish-grey on the upper parts, the sides of the face being ashy-grey, the flippers blue-grey above. The underparts are white.

Rookeries occur along the Australian coast from about Port Stephens north of Newcastle to south-western Australia. Throughout this area, and around Tasmania and New Zealand, few islands lack their quota of breeding Penguins. The birds are at the colonies from about August to March. The one or two white eggs are laid in little cavities in the rocks, in caves, or else in cavities scraped out under the tussock grass or a shrub. In any colony there is always quite a difference in laying dates, so that one pair may be sitting on eggs and another be feeding well-grown young.

At the end of the breeding season the adult penguins return to the islands to moult. In penguins, as in ducks, the feathers of the body are shed in great masses, incapacitating the owners. Since the Penguins cannot take to the sea the couple of weeks of the moult is a period of fasting.

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Carl and Lise Weismann are thankful to five Danish dogs whose barking they recorded and put together to make the record "The Singing Dogs". It was sold all over the world and provided the necessary finance for their expedition to Australia and New Zealand.

Carl is one of the pioneers of the sound recording of bird calls in the open. He made his first recordings as early as 1934 in collaboration with the Danish State Radio.

Carl and Lise married in 1956 after finishing the famous "Singing Dogs". They arrived in Sydney in August, 1957 and chased birds with their tape recorders and obtained recordings of the calls of thirty-four species. The calls of nineteen of these are the subject of the record which goes with this book.

Dr. Allen Keast was formerly Curator of Birds at the Australian Museum in Sydney. He is at present at Queen's University, Kingston, Ontario.

Here in this superb recording is presented the range of Australian bird song from the Mozart melody of the Butcherbird and the liquid fluting of the Magpie through the pert cheekiness of the Wagtail to the Noisy Friarbird's cheerful discordance. It is a record that will be cherished by every Australian nature lover.

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AUSTRALIAN BIRD SONGS